WHAT IS CLAIMED IS:

1. A recording apparatus for recording a compressed stream that is obtained by compressively coding audio/video signals, on a recording medium, including:

an encoder for compressively coding the audio/video signals and outputting a compressed stream;

a recording buffer memory for storing the compressed stream;

a recorder for recording the compressed stream stored in the recording buffer memory, on the recording medium; and

a system controller for controlling the respective units,

said encoder dividing a compressed stream of audio/video signals within a predetermined time range to form plural sub-units and forming a main unit from a group of these sub-units to output the compressed stream as well as creating sub-unit attribute information concerning the sub-units, and

said system controller generating management information for each of the sub-units from the corresponding sub-unit attribute information, and inserting the management information in a predetermined position in the main unit, and

said recorder reading the compressed stream successively from the recording buffer memory when the sub-unit management information has been inserted into the main unit, and recording the read stream on the recording medium.

2. The recording apparatus of Claim 1 wherein

the encoder compressively encodes the audio/video signals by a variable-rate controlled compression method.

3. The recording apparatus of Claim 1 wherein

the maximum number of the main units constituting the compressed stream is defined as a predetermined value N.

4. The recording apparatus of Claim 3 wherein

when the number of the main units constituting the compressed stream reaches the predetermined value N, the recording of the compressed stream is stopped.

5. The recording apparatus of Claim 1 wherein

the system controller forms a main unit set from a group of the plural main units, and

when the maximum value of the main units included in the main unit set is defined as a predetermined value n and the number of the main units constituting the compressed stream reaches the predetermined value n, the main unit set is formed from a group comprising the predetermined value n of the main units, then followed by starting formation of a next main unit set.

6. The recording apparatus of Claim 3 wherein

a memory size of the recording buffer memory is defined by a recording capacity of the recording medium and the predetermined

value N.

7. The recording apparatus of Claim 3 wherein

a memory size of the recording buffer memory is defined by a size of data to be recorded and the predetermined value N.

8. The recording apparatus of Claim 1 wherein

the encoder forms the main unit from the sub-unit group when a total data size of the sub-unit group becomes equal to or larger than a predetermined value M.

9. The recording apparatus of Claim 8 wherein

the predetermined value M is defined by a memory size of the recording buffer memory.

10. The recording apparatus of Claim 8 wherein

the maximum number of the main units constituting the compressed stream is set at a predetermined value N, and

the predetermined value M is defined by a recording capacity of the recording medium and the predetermined value N.

11. The recording apparatus of Claim 8 wherein

the maximum number of the main units constituting the compressed stream is set at a predetermined value N, and

the predetermined value M is defined by a size of data to

be recorded and the predetermined value N.

12. The recording apparatus of Claim 1 wherein

the encoder detects at least one information among information concerning a data size of the sub-unit, information concerning a position of the sub-unit in the main unit, and information concerning a playback time of the sub-unit, as the sub-unit attribute information.

13. The recording apparatus of Claim 1 wherein

the system controller inserts the sub-unit management information into the main unit so as to be placed at a head of each sub-unit.

14. The recording apparatus of Claim 1 comprising:

a unit for issuing a recording stop command or a recording start command,

said system controller posting a coding stop instruction to the encoder when the recording stop command is issued, and

said encoder finishing forming the main unit when receiving the coding stop instruction, taking a sub-unit that is being formed at a time when the instruction is received as a last sub-unit.

15. The recording apparatus of Claim 1 comprising:

a decision unit for deciding the type of the recording medium,

and

said system controller selecting either inserting the sub-unit management information in a predetermined position in the main unit on the basis of a result of the decision by the decision unit, or controlling the recorder for recording the sub-unit management information in a sub-unit management area on the recording medium.

16. A recording method by which a compressed stream that is obtained by compressively coding audio/video signals is recorded on a recording medium, comprising:

a coding step of compressively coding the audio/video signals, thereby generating a compressed stream;

a storage step of storing the compressed stream;

a recording step of recording the compressed stream stored in the storage step on the recording medium; and

a system control step of controlling the respective steps, wherein

in the coding step, a compressed stream of audio/video signals within a predetermined time range is divided to form plural sub-units, and a main unit is formed from a group of the sub-units as well as sub-unit attribute information concerning the sub-unit is created,

in the system control step, management information of each of the sub-units is generated from the corresponding sub-unit

attribute information, and each of the management information is inserted in a predetermined position in the main unit, and

in the recording step, the compressed stream in which the sub-unit management has been inserted is successively recorded on the recording medium.